Health and Welfare Canada

Canada

Chronic-Pain Programs

Guidelines

REPORT OF THE SUBCOMMITTEE ON INSTITUTIONAL PROGRAM GUIDELINES

Guidelines For Establishing Standards for:

CHRONIC-PAIN PROGRAMS

Published by
Health Services and Promotion Branch,
Health and Welfare Canada

Également disponible en français sous le titre
Programme de traitement de la douleur chronique

91-01201/

NOTE

The information contained in these guidelines is considered current as of the date of their approval. However, health care and health technology are constantly changing fields. Accordingly, suggestions for amendments are welcome. Information on new developments or related issues should be directed to:

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Cat. No. H39-168/1990E
ISBN No. 0-662-17506-9

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PREFACE

Changes in the delivery of health care services have led to the need for guidelines to assist in planning and implementing institutional programs and services. The guidelines that follow represent one of a series of publications produced under the direction of the Subcommittee on Institutional Program Guidelines. They provide a consistent definition of requirements for special services and programs in health institutions (hereafter referred to as services).

In general, guidelines are based on information, knowledge, experience, research and expert opinion from health professionals and organizations throughout Canada. This method allows many Canadians from across the country to contribute to the guidelines; hence a consensus on the suggested approach can be achieved. Additional material is often obtained from national and international health organizations and from other experts knowledgeable in the subject matter.

Background

Under the direction of the Federal/Provincial/Territorial Advisory Committee on Institutional and Medical Services, the guidelines program has been in operation since 1972. A standing Subcommittee of the Advisory Committee, the Subcommittee on Institutional Program Guidelines, composed of federal and provincial government and professional representatives, coordinates the development of the guidelines commissioned by the Advisory Committee.

The guidelines are produced by expert working groups of health professionals, some of whom are government representatives. The final draft is reviewed and recommended by the Subcommittee, for approval by the Advisory Committee.

Purpose

The purpose of the guidelines is to provide a comprehensive outline of requirements for services in health institutions. While a consensus of expert knowledge and experience is reflected in the guidelines, they should not be regarded as rigid standards. Provincial health authorities might modify the application of the guidelines to meet their needs.

Where development of a service is being contemplated, we believe the guidelines will be of help in determining the need for such a service, either locally, regionally or in some cases provincially or interprovincially.

Established services might take advantage of the guidelines to screen deficiencies and solve problems without having to develop new services. Where a service already exists, the guidelines will help to:

- identify problems related to administration, personnel, equipment and facilities,
- determine necessary remedial action, and
- set priorities for corrective measures on the basis of clinical need, funding and the degree to which the service is deficient.

Future

The dramatic increase in the number of intensive and special care services in health institutions has given rise to the need for additional facilities, specialized equipment and highly trained personnel. At the same time, new approaches to patient care have evolved. These emphasize the need for a continuum of care in which admission to an institution is only one aspect of total care. Therefore, linkages along the health care continuum, ranging from illness prevention to chronic care, must be identified. As new treatments and procedures are put into practice, there will be a continuing need for guidelines to assist those involved in the planning and operation of institutional services.

Revisions

Due to the rapidly changing nature of health care delivery, guidelines will need regular updating and revision. The Subcommittee on Institutional Program Guidelines plans and oversees these revisions.

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■ CHRONIC-PAIN PROGRAMS

1. INTRODUCTION

Institutional programs devoted to the diagnosis and management of chronic pain (see definition) have developed in response to increasing awareness, by physicians and the community, that chronic pain is a major health problem requiring special treatment approaches.

Chronic pain is a disabling and enduring condition which produces major life disruptions for the afflicted persons and those close to them. At the same time, the community is affected because often, instead of being self-reliant and productive, these persons become dependent and recipients of some type of public or private income-support program, or both. In addition, drug dependence may arise secondarily to the chronic pain. Except in rare circumstances, **no one therapeutic specialty or procedure, of itself, is effective in remedying this problem. The coordinated skills of several health disciplines are required.** This will be discussed later.

The program recommendations that will be described in this guideline have been shown to increase the functional ability of adults afflicted with chronic pain and at the same time reduce their dependence on drugs. One study has shown that these types of pain programs can return to the work force 60 percent of patients who were previously resistant to treatment (Catchlove and Cohen 1982). These recommendations are based on the advice of experts with extensive experience in the clinical management of chronic pain. Their backgrounds encompass both patient care and program administration. This is an evolving field. The number of chronic-pain programs is growing and they now exist in many forms. In Canada, chronic-pain programs have increased, over a 15-year period ending in 1987, from less than six to well over 40 (Catchlove and Hoirch 1989). It is likely that this increase will continue. At this time, the proportion of existing programs that conform to the guidelines contained in this document is unknown.

Although substantial progress has been made in diagnosis and management of chronic pain, many of these patients remain disabled, and more clinical and basic research is still required. We need much more knowledge about the epidemiology and the distribution of patients, preventative measures, and the right mix of therapeutic techniques for any individual.

2. DEFINITIONS

2.1 Chronic Pain

Chronic pain is pain which persists past the normal time of healing, is associated with protracted illness or is a severe symptom of a recurring condition. In most instances, the problem will have been present more than three months; in some circumstances, less time is required to identify the pain as chronic.

Sometimes the cause of chronic pain is obscure. The disorder can occur in the absence of evidence of physical illness and, although unrecognized physical causes might exist in such cases, they should not be implicated without good evidence of their presence. Psychological illness can be the cause of pain but also should only be used as an explanation if positive evidence is found to support such a diagnosis. Pain is often due to physical illness but is made worse or prolonged by independent psychological factors. (Here again, diagnosis depends upon supporting evidence.) As well, chronic painful lesions might cause marked psychological changes.

It has been the custom in some sectors to refer to chronic pain not arising from malignancy as "benign" but, in view of the serious difficulties frequently associated with this type of pain, many consider it inappropriate to use the term "benign."

2.2 Chronic-Pain Program

For the purposes of this document, a chronic-pain program is a comprehensive, coordinated interdisciplinary management program for persons complaining of chronic pain. The term encompasses all aspects of the physical plant, equipment, personnel, etc. that might be required in the operation of the program. The main program objective is to reduce pain and rehabilitate the whole person. Another objective is the prevention of chronic pain through community and professional education.

(Although the majority of patients treated in pain programs suffer from chronic pain as defined above, there are also a substantial number of cancer patients who are referred to pain programs for pain management. On occasion, those not regularly involved in pain management find it hard to distinguish between palliative care services and chronic-pain programs. This arises because: cancer patients may need treatment in a chronic-pain program; techniques such as nerve blocks are applicable to both chronic pain and palliative care; the same personnel might administer these nerve blocks; in some hospitals these services are combined. However, palliative care and chronic-pain are, and should be, distinct and separate programs. Palliative care is the

subject of another guideline in this series, entitled *Palliative Care Services* [Health and Welfare 1989].)

2.3 Core Team

The core team is the mix of professionals who are primarily responsible for the management of the chronic-pain patient. The team has a medical director, but management of the patient's problem is a team effort. Operationally, the patient is part of the team. (See also 7.2.)

2.4 Consultant Group

A consultant group consists of professionals who are not part of the core team but whose services are often called upon in the management of persons with chronic pain and who function in close liaison with the core team. (See also 7.3.)

2.5 Transcutaneous Electrical Nerve Stimulation (TENS)

Transcutaneous electrical nerve stimulation is a non-invasive procedure for stimulating peripheral nerves for the purpose of relieving pain.

3. HISTORICAL BACKGROUND

Chronic pain has been with man since the beginning of time. Modern attempts to treat chronic pain by injection started quite soon after the discovery of local anaesthetics in the 1890s. From the turn of the century and into the 1920s, physicians, particularly in Europe, tried to relieve chronic pain by injecting local anaesthetic directly into the painful site or into the spinal canal. Relief was brief at best. It was not until the 1930s, with the discovery of alcohol injection into the spinal nerves to produce permanent numbness and analgesia for cancer pain, that systematic, effective, long-term pain relief became available.

As a result of their successes with cancer pain, anaesthetists began to be consulted for chronic pain unrelated to cancer and initially used similar techniques. Organized clinics to treat both kinds of chronic pain were started in the United States and England in the 1940s. Clinics developed later in Canada, Australia and parts of Europe.

Reports from these clinics appeared in the 1950s and 1960s. The reports made it clear that chronic pain of non-malignant origin did not respond well to permanent nerve blocks or neurosurgery, but required a

much more comprehensive approach than that being employed for cancer pain. Around this time, the concept of the multidisciplinary pain centre emerged. Using this approach, various medical specialties, and other health and social science disciplines, worked together to evaluate chronic-pain patients and, in a conference of all members, establish a diagnosis. The conference appointed one of the medical specialists as patient manager. As a result, while diagnosis was made on a multidisciplinary basis, subsequent treatment was more likely unidimensional as it tended to follow the specialty of the patient manager.

More recently, this method has been revised to one which consists of a **core team** which has charge of the patient and renders treatment in an integrated manner. The team deals with both physical and psychological aspects of diagnosis and treatment. The core team is assisted by a **consultant group** of specialists from other disciplines, available to consult on specific cases. **The core team and consultant group approach is the one recommended.**

4. ECONOMIC AND SOCIAL FACTORS

4.1 Some Economic Implications

While the cost of chronic pain is not well documented, it is thought to be considerable. There are some data on back disorders which illustrate the economic impact of chronic pain. In this regard, the Quebec Task Force on Spinal Disorders reported that, in 1981, 1.7 percent of the employed population of 2.7 million was compensated at least once for a spinal disorder acquired at work. The costs of these claims were $150 million -- 14 percent for medical care and 86 percent for compensation. Further, 7.4 percent of all claims for spinal disorders consumed 75 percent of all compensation costs. While three quarters of workers returned to work within three weeks, those who remained absent from work after three months post-accident tended to remain absent for extended periods (La Rocca 1987). There appears to be little doubt that these data are typical, can be generalized across jurisdictions, and persist to this day. Besides direct disbursements for care and compensation, there are also other types of economic loss, such as time and production lost in recruiting new employees, cost of replacement personnel if the worker is on extended sick leave, and so on.

4.2 Loss of Productivity, Family Disruption

Some persons with chronic pain are out of the work force and on disability benefits for extended periods, sometimes as long as five or more years. Before the injury or illness which led to chronic pain with its related

incapacity, many of these people were conscientious, hardworking, and held responsible positions. In addition to the foregoing loss of productivity, it is the experience of practitioners at pain centres that this marked disruption in personal life can have consequences of drug dependency, marital discord, family breakdown and so on (Flor et al. 1989).

4.3 Those Outside the Work Force

It is not only members of the work force who are affected; homemakers, children and the elderly can all be afflicted by chronic pain. In keeping with the demographic changes in our society, an increasing proportion of patients seeking help from pain programs is from the older segment of the population.

4.4 Community/Client Expectations

Not all individuals experiencing chronic pain will accept their condition stoically. Many will continue to seek relief. Often, they will try unidimensional approaches which rely principally upon one technique, or they might try a limited range of physical interventions, such as nerve block, acupuncture, TENS, chiropractic, etc. Generally these will not succeed (see Section 3). Consequently, it is anticipated that many chronic-pain patients will turn to interdisciplinary pain programs like those recommended herein.

5. ASSESSMENT OF PATIENT POPULATION

5.1 Prevalence of Chronic Pain

The extent of chronic pain in the population was not known until studies during the 1980s showed how prevalent a health problem it is. In a pain study conducted in Burlington, Ontario, 11 percent of respondents reported a persistent problem with pain and had experienced that pain within the two weeks preceding the survey. Women were the most commonly affected, and the prevalence of persistent pain increased with age. The anatomical regions most often affected with persistent pain were back, lower extremities, head, neck and shoulders (Crook 1984).

Sternbach (1986) noted a high incidence of pain-associated morbidity. A significant number of adults experienced three or four different kinds of pain for more than 100 days per year. Based on the respondents' self-report of a lifetime history of five selected pain conditions, Von Korff (1988) estimates that among persons surviving to age 70, 85 percent will experience a problem with back pain. The lifetime occurrence of headache, abdominal pain and chest pain conditions are projected to exceed 40 percent, while about one third of all persons surviving to age 70 will have experienced an episode of facial pain at some time during their lives.

Data available for the period 1966-87 from the Toronto General Hospital pain clinic showed that, of more than 7,000 new patients referred, 68.8 percent suffered chronic pain; the rest suffered pain of malignant origin. The mean age was 48 years, and average duration of the painful condition was 4.7 years. **The association of pain with functional disability was strong.** Only 0.3 percent of the referrals considered their level of activity as normal, although most (68 percent) could care for themselves (Evans 1988).

5.2 Population Criteria for Establishing a Chronic-Pain Program

While pain is commonplace, there are no standard criteria which describe the minimum population necessary to establish a chronic-pain program. It is the experience of practitioners in the field that having a pain program in place soon generates full case loads and long waiting lists. Due to

the intensive nature of treatment, pain programs generally can manage only a small number of patients at any one time. Due to the nature of their problems, turnover of clientele is slow. Although the minimum «demand» necessary to establish this service is unknown, a facility or community can obtain an indication of its ability to maintain a chronic-pain program by reviewing Sections 6 to 10 which follow.

6. PROGRAM DESCRIPTION

Important characteristics of chronic-pain programs are also contained in Section 7, Personnel and Staffing.

6.1 Introduction: The Fundamentals of a Chronic-Pain Program

The multi-faceted, complex causes of chronic pain, intuitively understood at the time of the formation of multidisciplinary clinics, are now well documented and more widely appreciated. Several studies have reinforced the effectiveness of a medically directed **team approach** in conjunction with utilization of a wide range of health care services, including such therapeutic modalities as acupuncture, hypnosis and chiropractic (Aronoff 1985; Schaefer 1985).

Accordingly, the following principles are cited as being basic to a chronic-pain program:

- there must be a **core team,** with a dedicated consultant group
- this core team is **interdisciplinary and directed by a physician**[1]
- the core team is responsible for the admission of patients to the program and day-to-day patient evaluation, as well as the formulation and administration of treatment. The consultant group provides specific consultation in selected cases and provides input to the multidisciplinary meeting to discuss special or unusual cases

  a detailed description of the core team is provided in Section 7.2

- **the treatment approach is comprehensive, multimodal and integrated.** That is to say, it is not confined to nerve block, biofeedback, etc.

1 While there are other models, the consensus amongst the experts consulted is that a physician-director with overall responsibility best fits the needs of a chronic-pain program.

To be effective, programs must attend not only to the physical problem(s), but must also focus attention on social, familial, psychological and work factors. As a corollary, unidimensional approaches, e.g. nerve block clinics, acupuncture clinics, etc. have been found to be largely ineffective in persons with chronic pain and are **not appropriate** on their own in the management of these disorders

- **the patient is part of the treatment team.** Treatment programs must place a strong emphasis on the concept of patients as individuals who can and must assume increasing responsibility for their health and well-being and for achieving control over their problems

- **the successful management of chronic pain requires integrated services, consistency in management and long-term stability. In keeping with this need for consistency, a chronic-pain program should have designated space and resources for its service needs.** Furthermore, members of the team should, to the fullest extent possible, rely on this dedicated space only when rendering services to chronic-pain patients

- pain programs often require the professional services of personnel from many different departments, usually on a part-time basis. The satellite personnel who are not part of the core team should, to the extent possible, be routinely available during regular program hours. **Because of the need for consistency and stability, other departments should provide personnel whose time is specifically dedicated to the pain program**

- **in the unit set aside for chronic-pain services, space should be available for recreational activities, relaxation, exercise, biofeedback, behaviour modification, nerve blocks, individual and group psychotherapy, occupational therapy, physiotherapy and other related services which the staff feels are appropriate.** The goal is to have care that is consistent and stable (as mentioned above) and not splintered. Provided these objectives are met, some of these functions can take place in other parts of the institution

- to help foster independence, **most care will be rendered on an ambulatory basis.** When required, **hostel accommodation should be available, and affordable,** for patients who reside at a distance and cannot return home on a daily basis

- **pain programs should operate on a full-time basis** (generally a five-day week with suitable after-hours coverage)

6.2 Goals and Objectives

Pain centres aim to provide relief of pain and suffering, as well as long-term rehabilitation, in order to prevent reoccurrence of the original condition or the emergence of a similar or replacement condition. The preventive aspect forms a major part of treatment in integrated comprehensive pain programs. Alerting health professionals to the need for appropriate management of acute pain should be an objective, as this might also lessen the development of chronic pain. Certain goals arise out of these general considerations. They include:

- reduce pain and/or the disability associated with the pain
- reduce reliance on drugs and other treatment modalities
- identify inappropriate behaviours - physical and psychological - and teach healthy behaviours appropriate to the patient's condition
- help regain independence
- improve physical functioning levels appropriate to age and condition
- return the patient to the workplace or equivalent environment
- increase bodily awareness, both physical and psychological aspects, and knowledge of the relationship between the two
- learn limits appropriate to the conditions and how to deal with demands to exceed these limits
- educate health professionals in the community about pain management

6.3 Delivery Models

This document recognizes the diversity of approaches to managing chronic pain and appreciates the importance of continuing this diversity in the interest of evolving novel and distinct approaches to the many different pain problems encountered. Individual preferences and local conditions will quite legitimately determine what approaches are ultimately feasible. Nonetheless, certain aspects of chronic-pain management are common to different programs (Section 6.1). It is on the basis of this understanding, our knowledge about the historical evolution of pain programs, and a recent survey of delivery systems for chronic-pain care (Catchlove and Hoirch 1989), that the following structures are suggested as appropriate for Canada at this time:

a. core team with a multidisciplinary consultant team in a major university hospital encompassing all required specialties, modalities of treatment, and diagnostic and therapeutic equipment;

b. core team with a limited consultant team, usually in a specialized hospital (e.g. rehabilitation) or a regional hospital with fewer diagnostic and therapeutic capabilities. (Such a team could also exist in a major university hospital.) Structured association with a pain-management centre based in a university hospital (described in a. above) is essential;

c. core team associated with a peripheral (small) hospital. Formal direct association should be established with a major centre; and

d. core team in a free-standing unit.[2] Association with a major centre is highly desirable.

Any of the above programs can have **outreach services** in which staff and necessary equipment can visit more sparsely populated regions, special populations in an urban area, e.g. cancer clinics, or form part of a mobile unit in a regional health care delivery system, etc.

6.4 Administrative Policies

Treatment of chronic pain should be recognized as an inherent function of the institution where the pain centre will be established. The institution's board, medical advisory committee and administration need to recognize that the chronic-pain treatment program is a separate and defined entity within the institution and needs to be supported as such. The institution should insist that the team approach be applied in pain management and that the team consist of a specific group of health professionals for whom dedicated and/or consistent resources, such as financing and space allocation, have been provided. The administration should insist that a pain program have written policies and procedures in place.

6.5 Admission Policies

Policies should state from whom referrals will be accepted. The information to be provided with referrals should include a suitably detailed letter from the referring physician, copies of relevant reports, demographic information, and pain-related questionnaires (completed by the patient). Duration of pain should not be used as an admission criterion.

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2 Currently, most free-standing pain programs in Canada are profit-orientated and outside of the public hospital system. While they are not common in Canada, free-standing centres might permit development of innovative approaches. However, standards will need to be developed to govern practice in these centres. The need for combined medico-psychosocial approaches applies equally to free-standing centres and hospital units.

Commitment on the part of the patient to the treatment program is important. Failure to keep appointments without good cause may be an indication of poor motivation; this issue should be addressed in policy statements about access to reappointments.

6.6 Relationships with Other Departments, Services and Agencies

Chronic pain involves multiple systems, and treatment requires modalities from many disciplines. Hence, relationships with other departments within the institution are crucial. The treatment services that are consulted will depend upon both the qualifications of the core team and the nature of the pain service's case load. Departments that are frequently called upon for consultation include anaesthesia, neurology, neurosurgery, occupational therapy, oncology, orthopaedics, palliative care services, physiotherapy, psychiatry, physiatry, and radiotherapy. The investigative services of major importance are medical imaging (diagnostic radiology) and neurology. Other clinical and investigative services, such as recreation and social work, will be involved from time to time. Formal links should be established with the main service and investigative units. These links should be with specific personnel.

Due to the disastrous effects chronic pain can have on family functioning, family support services are becoming a part of some pain programs.

To help with continuity and commitment to treatment, the family physician should be involved in, and/or kept apprised of, the treatment process.

A major treatment objective for many patients is rehabilitation and reintegration into the work force, a process which is facilitated by formal liaison with representatives of industry, social services, workers' compensation boards, automobile insurance boards and other third-party payers. A **specific member of the team should be designated for this task.**

The pain program will serve as a facility for teaching and research, and appropriate affiliation and liaison should be established with medical schools, other university departments, and community colleges.

6.7 Allocation of Physical Resources

As mentioned in 6.1, outpatient and ambulatory care is the preferred treatment model for chronic-pain services. Policies should also favour these services taking place in specific space consistently available for the use of the pain program. Details are provided under Section 8.

6.7.1 Bed Requirements

Inpatient management is sometimes required for analgesic drug dependency and for investigations and treatment too complex to undertake on an ambulatory basis. Current Canadian experience indicates that 4 to 6 beds per million population is appropriate.

6.7.2 Hostels

Management of the chronic-pain patient is often protracted. However, intensive nursing care is seldom required. Where a hospital frequently accepts patients who are a distance from home, **hostel-type accommodation** should be available.

7. PERSONNEL AND STAFFING

7.1 General Considerations

The need for consistency of setting and staff in chronic-pain programs is a recurring theme throughout this document. This consistency provides a sense of stability and security for the patients and support for the staff. These needs should be borne in mind when staffing is considered.

The pain program should be under the direction of a physician. This supervisory role should be provided by individuals with training and experience in dealing with the unique needs of chronic-pain patients. Other staff will be drawn from several services because of the multi-faceted nature of chronic pain and the multi-modal treatment programs which this demands. The most popular current approach in pain centres in Canada is a **core team** with a satellite **consultant group.** (See Sections 2, 3 and 6.)

The personnel of both the core team and the consultant group should, to the fullest extent possible, be consistent. One or more psychiatrists and/or psychologists **must** be an inherent part of the core team. Additional psychological/psychiatric support may be available in the consultant group.

It is essential that sufficient secretarial support be made available to enhance communication with referring doctors, community agencies, etc. (See also Sections 6.6, 9.2.)

Provision should be made for means to prevent "burnout" which arises from having to deal continually with patients who are likely to be pessimistic and bitter about how their lives have evolved. Possibilities include limiting the time spent with chronic-pain patients to about 25 hours per week, with

the balance of time on duty spent on work activities not related to the chronic-pain program. As well, duty time should be made available for professional upgrading. The circumstances for each program will be unique, e.g. work assignments may come under the conditions of a collective agreement; however, this type of staff morale problem should be considered when planning and operating a chronic-pain program.

7.2 Core Team

7.2.1 Introduction

The core team should operate so that professional care is integrated and concurrent. **This implies a matrix management system which should preclude situations wherein patients are simply shifted sequentially from one type of care to another.**

In order to address the needs of chronic-pain patients, all the professionals in the core team must have a special interest and valid experience in the management of chronic pain. Team members should be prepared to develop a profound understanding of chronic pain and its repercussions upon patients' lives. In evaluating persons referred to the program, the team should be prepared to undertake a thorough history and examination of the medical, psychological and social aspects of the chronic-pain problem so as to establish an accurate diagnosis and discern the important personal and social factors that have an impact on treatment and recovery. Notwithstanding the problem of burnout referred to in 7.1, appropriate amounts of the core team members' time must be specifically allocated to the pain program and should be coordinated so that they may work together.

7.2.2 Composition of the Core Team

The core team should include the following health disciplines:

- a **physician** is essential to undertake the general medical evaluation. There may be more than one medical doctor. Physicians should have expertise in the diagnosis and management of pain. As noted in 7.5, they may come from one of several medical backgrounds. They would see all patients

- an **anaesthetist** will generally be needed as an integral part of the team, to administer nerve blocks, provide pharmacological advice, etc. (and may be the physician mentioned above)

- a **psychologist** or a **psychiatrist** or both may be necessary for intake assessment and case management. (The latter can also fill the role of physician mentioned above)

- **physiotherapists and/or occupational therapists** are important to a core team because of the strong emphasis on rehabilitation in chronic-pain management

- a **nurse** who is part of the team should have a special interest in chronic pain. In addition to usual nursing duties, this person would provide, where there is an inpatient component, a consultative resource for ward nurses

- a **pain-program coordinator** is required. The coordinator plays a major role in facilitating integrated care, in the overall organization and functioning of the core team and in its liaison with the community. (See Section 9.) The coordinator might also act as a research assistant and, with appropriate training, may provide simple therapeutic modalities, such as some forms of biofeedback and TENS.

7.3 Consultant Group

Consultations are often required from neurologists, neurosurgeons, orthopaedic surgeons, general surgeons, dental surgeons, social workers and in some instances specialists in clinical pharmacology, chiropractors and acupuncturists.

7.4 Support Personnel

A secretary/receptionist, full or part-time according to need, will be required. As data systems should be computerized, someone should be available for data entry, retrieval and analysis.

7.5 Qualifications

7.5.1 Introduction

Members of the core team need an orientation towards long-term cooperative management and a preparedness to work closely with colleagues. Core team personnel should have had training in an established pain-management program. Suggested training periods for the various professions are mentioned below.

7.5.2 Director

The Director may be any medical doctor among the core team members, and must be present or available during all treatments, since responsibility for patient care will ultimately devolve upon the Director. At present, there are no specialty programs for training in chronic-pain management, although the Royal College of Physicians and Surgeons of Canada requires residents in anaesthesia to spend one month of training in this field. A 1987

survey of different kinds of pain programs showed that, in Canada, 38 percent of chronic-pain facilities were directed by anaesthetists, while others were directed by psychiatrists (11 percent), physiatrists (8 percent) and neurologists (5 percent), with many different specialties directing the remainder (38 percent) (Catchlove 1989). These results are consistent with the historical evolution of pain programs. (See Section 3.)

7.5.3 Coordinator

Appropriate background education includes nursing and/or university graduation in the behavioural, social or biological sciences.

7.5.4 Nurses

The management of chronic pain is an emerging field and, at the time of printing, there are no known organized training programs for nurses. Nonetheless, relevant nursing experience can be acquired on an ad hoc basis at an established pain program. A period of three to six months training would be appropriate.

7.5.5 Physicians

General medical experience in family practice is invaluable for physicians. Anaesthetists, neurologists, neurosurgeons, physiatrists and psychiatrists are, by the nature of their specialties, the most likely to be interested and involved in chronic-pain management, although any physician might have such an interest. However, for other physicians, additional training at a pain program will be required. This would involve about one year, at least, in the absence of equivalent experience.

7.5.6 Physiotherapists or Occupational Therapists

The therapist involved in an interdisciplinary service should have a specific interest in the special needs of chronic-pain patients. As the goal of the therapist in this setting is education and prevention rather than acute intervention, the required skills should include assessment, basic exercise techniques, body awareness, biofeedback and relaxation training. A well-rounded background in therapy used in orthopaedics, neurology and rehabilitation is an asset.

7.5.7 Psychologists

Broad experience with behavioural, cognitive and psychodynamic aspects of pain management is essential. Training in an established pain management centre should be at least six months to one year.

8. FACILITIES AND EQUIPMENT

8.1 Facilities

8.1.1 General[3]

Chronic-pain patients often have been through a series of, for them, unsatisfactory experiences with the health care system. Accordingly, spatial arrangements should provide lighting, colour and furnishings that facilitate relaxation and generate confidence for the difficult rehabilitation process they are about to undergo. Space should be consistently assigned or dedicated for the use of the pain program. (See also 6.7.)

8.1.2 Outpatient Program

As mentioned in 6.7, chronic-pain programs are primarily outpatient programs. Space requirements for an outpatient program might include the following:

- offices for a Director, each full-time equivalent physician or other health professional, and the coordinator
- examination rooms, one per full-time physician, as well as examination/testing rooms equipped to provide biofeedback, TENS, relaxation, etc.
- waiting room large enough to seat 8 people and permit a display of relevant literature, handouts and diagrams through which patients can browse
- conference room, library and seminar room for the regular weekly meeting of the pain group
- a room for group physiotherapy, group psychotherapy, spouses' groups, exercise, etc. If appropriately equipped, this space may double as a room in which to do nerve blocks (see 8.2); otherwise an additional room will be required to do outpatient nerve blocks
- operating room access for special nerve blocks, including x-ray control and recovery room access for care following nerve blocks
- special rooms may be required in some centres to maintain a constant environment, e.g. for thermography.

3 Opinions on design information and definitions of net and gross areas may be obtained from provincial and other sources, including *Space Programming Methodologies*, Health Services and Promotion Branch, Department of National Health and Welfare, Ottawa, 1984.

8.1.3 Space: Inpatient Program

Beds assigned for an inpatient program should be grouped in a specific area of a larger unit. Specially trained nursing staff who are familiar with the program's objectives and mode of operation should be in attendance or readily available as resource persons. There should be easy access to physiotherapy, psychology and occupational therapy departments. (See also 6.7.1.)

8.1.4 Hostels

The location of hostel-type accommodations should allow for convenient access to the outpatient pain-service treatment areas. Opportunities to gather socially may be provided.

8.2 Equipment

Equipment for a pain-management program is generally fairly simple and relatively inexpensive.

Basic equipment for a physiotherapy room should include floor mattresses, full-length mirrors on one wall (or full-length mirrors on wheels), pillows and bolsters as required, a sound system for music, and a video camera, recorder and television for playback of exercises. In some institutions, nerve blocks may be done in this room as well. In such cases the room needs to be equipped with appropriate stretchers, full facilities for resuscitation and located close to (and with ready access to) recovery room areas and the operating room. A separate room for nerve blocks is equally suitable provided resuscitation needs are met.

More sophisticated nerve block procedures will require access to operating tables which are radiolucent, image intensifiers, nerve stimulators, cryoprobes and radio-frequency lesion generators. These will generally only be required in Type I facilities as described in 6.3.

Seminar and testing rooms require an adequate number of comfortable chairs, a VCR, playback facility, audio-visual equipment and bookshelves. Examining rooms should be standard ones and appropriately equipped for medical examinations. They should also have a comfortable bed or reclining chair, dimmer lights, biofeedback equipment, TENS equipment and a washbasin in each room.

The secretary's office should have the usual secretarial equipment, including direct access to computers for data storage and word processing. There should also be an adequate storage room for supplies and files.

While the following equipment need not be located within the pain management centre, there needs to be access to investigative facilities such

as nuclear medicine, CT scan and diagnostic radiology, as well as therapeutic equipment such as whirlpools, swimming pools and exercise and rest areas.

9. COMMUNITY AND PROFESSIONAL LIAISON

9.1 Introduction

Active integration into the work force and community is an essential objective of pain management (see also 6.2, 6.3, and 7.2). To ensure effective follow-up, it is important that there be liaison with all relevant sections of the community. To this end there must be adequate staffing and funding to facilitate reintegration into the community. Part of this liaison involves educating patients and the community about realistic expectations from a pain program. For example, a return to the work force might require job retraining because of an inability to resume former employment. Generally, community liaison is a designated responsibility of the program coordinator (see 7.2.2, 7.5.3).

9.2 Community

This section describes those sectors of the community with which, or whom, liaison is important.

9.2.1 Community-Based Physicians

Many patients have chronic pain originating in injury suffered at work or elsewhere in the community. Typically, treatment is first rendered by community-based physicians. Many of the referrals to the chronic-pain program will originate with these same physicians. To the fullest extent possible, attending physicians should be kept apprised of patients' progress and recommendations made by the chronic-pain program. This will allow subsequent community-based treatment to be consistent with the management undertaken by the chronic-pain program. Another reason such liaison is important is that there are still many physicians who tend to use the acute-pain model for the control of chronic pain. Often the remedies which work well in the acute situation are inappropriate when the problem is chronic.

9.2.2 Hospitals

Linkages amongst hospital-based programs are desirable on a regional basis in order to help rationalize the provision of these services.

9.2.3 Rehabilitation Centres

Where pain clinics are established in rehabilitation facilities, they should have ready access to the diagnostic and consultative services of an acute-care hospital. (See also 6.3.)

9.2.4 Workers' Compensation Boards (WCB)

These agencies might establish their own pain-management centres but are not likely to have the full range of facilities of a major hospital. More commonly, patients under WCB jurisdiction are treated by hospital-based or free-standing pain programs. There might be some form of contractual arrangement with a workers' compensation board. Very close liaison between the pain program coordinator and the compensation board is required to facilitate the return to work, the definition of limitation in work activity, and the final amount of compensation to be awarded. In some provinces, liaison is often poor or non-existent. Sometimes the efforts of the pain programs and the WCBs are at odds, with the net result that patient care suffers, and there is an economic loss to the community which might have been avoided.

9.2.5 Industry

Liaison with industry representatives, especially medical personnel, is vital for long-term rehabilitation and reintegration into the work force and community. Ideally, pain centres should be able to cooperate with industry and WCBs to help prevent injury.

9.2.6 Third-Party Payers (e.g. insurance companies)

Similar considerations apply to these organizations as apply to WCBs except that there is greater fragmentation and diversity of functioning. The pain program coordinator is vital in ensuring that the activities of third-party payers are consistent with and integrated into the overall program for each patient.

9.2.7 Detoxification Centres

A small number of pain patients have serious addiction problems requiring detoxification. A formalized working relationship with a detoxification centre is of great value in patient treatment.

9.2.8 Home Care

At the present, most follow-up is done by the hospital-based programs. However, local arrangements may be such that community home care services can be utilized.

9.2.9 Medical Schools and Universities

Many chronic-pain situations could be avoided with appropriate early management, starting with the acute phase of the injury. Contact with the university is therefore important to facilitate appropriate input into teaching programs for health care providers at the undergraduate and continuing education levels.

9.2.10 Self-Help and Special Interest Groups

Self-help and special interest groups serve as valuable resources and support for patients after they return to the community. It should be part of the function of the pain unit to facilitate, within reason, the establishment and functioning of such groups.

9.2.11 Community Awareness

The media can raise community awareness of this problem, which in turn should help patient care and patient rehabilitation, as well as increase overall support for efforts to ameliorate the problem of chronic pain.

10. ASSESSMENT OF TREATMENT OUTCOME AND QUALITY ASSURANCE

10.1 Assessment of Treatment Outcome

Pain programs are difficult to evaluate due to the inherently complex nature of chronic pain. Involvement of physical and psychological systems within the patient, and the important effects these have on a patient's work, family and interpersonal relationships, suggest a comprehensive evaluation should take account of all these aspects. For example, does a return to the work force without a change in the pain level, or the reverse, complete relief of pain but inability to return to work, constitute improvement? Outcome measures are still a matter of much discussion. It is hoped that Canadian pain programs will develop a system of rating that will permit realistic evaluation of outcome.

10.2 Quality Assurance

Quality assurance does not appear to have been addressed in the literature nor in the practice of Canadian pain programs. Recently, a start has been made in this direction in the U.S.A. (Aronoff 1988). Even in the absence of widely held standards, it is still appropriate within the context of these guidelines to consider some means for quality assurance. Indicators of quality of

care might include: regular periodic appraisal of employee performance, systematic collection of reports of incidents, regular review of individual patient care programs, the compilation of epidemiological data for a specific pain program, comparisons with other pain programs, and peer review by personnel from outside pain centres. Development of a means of assuring quality of care in some form should be a priority of the Canadian pain community.

10.3 Accreditation

At present, in Canada, there are no accreditation standards in the field of chronic-pain management. Initial efforts towards accreditation have started in the U.S.A. but are not universally adopted there (Aronoff 1988). As mentioned elsewhere (see Sections 6.1, 6.3, and 7.1), management of these patients requires a team approach and hospital authorities should be wary of any request to establish unidimensional chronic-pain services, regardless of the proponents' credentials.

11. TEACHING AND RESEARCH

11.1 Teaching

Chronic-pain management is an emerging medical specialty, but it is not yet recognized as a separate specialty of the Royal College of Physicians and Surgeons of Canada. As mentioned earlier in 7.5, the College requires that residents in training for the specialty of anaesthesia spend at least one month in a pain-management unit. Residents from other disciplines (e.g. physical medicine, psychiatry, family medicine) may elect to do a rotation in pain management. Senior students in medicine, physiotherapy, psychology and occupational health are becoming more aware of pain-management programs and are seeking elective experiences in this field. In view of the very small number of experienced health care professionals in this field, there is a need to train others to meet an emerging manpower need. Hospitals that are affiliated with teaching institutions, or that have developed a model facility and staff, need to incorporate the space and resources necessary to meet the demands for this type of training.

11.2 Research

While there has been an enormous increase in the amount of basic research in neuroanatomy and neurophysiology in relation to pain, clinical research on human pain problems has not developed to the same extent. There has been little documentation of the epidemiology of chronic pain and

few comparisons of the effects of established treatments on the outcome of particular chronic-pain patient populations. There has not been an adequate evaluation of the quality of studies nor evaluation of the research requirement in chronic pain.

The few good studies in the management of chronic pain confirm that the types of programs advocated by these guidelines (which have a holistic approach and a matrix management mode of operation) are more effective in returning people to work and reducing their dependence on drugs than the standard medical model which based management on the specialty of the attending physician and functioned on a hierarchical basis (see also 3. "Historical Background" and 4. "Economic and Social Factors").[4]

The outcomes of chronic-pain programs need further documentation and evaluation through an active program of data collection and analysis so that hypotheses can be tested prospectively on selected populations. The need for a research fellow, computerization, and personnel to assist with statistical analysis should be considered when planning a chronic-pain program.

4 While the traditional medical model generally has not been successful in respect of the treatment of persons with chronic pain, it remains valid insofar as it emphasizes the need to establish a diagnosis through appropriate history taking, examination and investigative procedures.

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■ APPENDIX I

ADMINISTRATIVE ORGANIZATION, POLICIES AND PROCEDURES

Guidelines for the administrative organization, policies and procedures for units/services/programs (hereinafter referred to as program(s) in hospitals) were formulated after a review of provincial, national and international information.

It is hoped that the following outline will serve as a guide for the development of more comprehensive and specific program policies in order to ensure the most effective and efficient delivery of patient care in these programs.

I. PHILOSOPHY, ROLES AND OBJECTIVES

- Philosophy, roles and objectives of the programs
- Type of patient served
  - by diagnosis and/or severity of illness
  - restriction of service, if any

II. ORGANIZATION OF PROGRAM

1. General

- Governing board responsibility
- Relationship to administrator and medical staff
- Program management

2. Staff

- Medical director
- Other medical staff
- Nursing staff
- Other staff

3. Committees

- Membership to be defined by discipline and number
- Terms of reference to be defined
- Provision for consultation with appropriate hospital and medical staff
- Schedules for formal and ad hoc meetings

III. POLICIES FOR OPERATION OF PROGRAM

1. General

- Admission authority (identification of individual(s) who have authority to admit)
- Admission priorities: diagnostic category, clinical condition
- Admission
- Medical orders
- Emergency admission standing orders
- Discharge policies and planning
- Length of stay by diagnosis
- Infection control and isolation
- Patient records, reports and charting
- Handling of emergency situations, including C.P.R.
- Emergency delegation of responsibility to medical, nursing and/or other staff
- Research/clinical investigation
- Palliative care, determination of death, authorization for autopsies and handling of bodies

- Referral and consultation (mandatory and other, transfer, follow-up)

2. Staff

- Selection criteria: education, experience and interests
- Criteria for granting medical/clinical privileges
- Medical coverage/staff coverage of service
- Delineation of student and supervisor roles, including responsibility, authority and accountability
- Position descriptions
- Orientation and continuing education
- Performance evaluation
- Volunteers

3. Patient

- Patients' rights
- Patient identification
- Family participation
- Confidentiality
- Patient/family education
- Patient valuables, assets and belongings
- Consent for treatment
- Visiting privileges

4. Safety

- Safety and accident prevention
- Reporting of accidents and incidents
- Equipment maintenance and safety
- Fire and disaster plan
- Use of restraints

5. Quality Assurance

- Practice standards
- Continuing evaluation of effectiveness of service
- Patient status assessment on admission and discharge

- Incident reports
- Patient-care review
- Infection control
- Audits: medical and nursing care, concurrent and retrospective
- Peer review
- Morbidity/mortality review
- Employee performance appraisal
- Product and equipment use and evaluation

IV. PROCEDURES

- Elective procedures
- Emergency-alert system procedures
- Medical record and statistical procedures
- Policy and procedure manuals

APPENDIX II

GUIDELINES FOR INSTITUTIONAL PROGRAMS

The following guidelines have been prepared by the Federal/Provincial/Territorial Subcommittee on Institutional Program Guidelines. These guidelines were requested by the Federal/Provincial/Territorial Advisory Committee on Institutional and Medical Services. Some of the guidelines are updated versions of guidelines previously published by the Subcommittee.

Addiction Services in Hospitals (1984)

Adult Long-Term Institutional Care (1984)

Adult Psychiatric Services Provided by General Hospitals (1988)

Assessment and Placement for Adult Long-Term Care: A Single-entry Model (1988)

Breast Imaging Services: Mammography (1986)

Burn Unit (1985)

Cardiovascular Services in Hospitals (1986)

Child and Adolescent Psychiatric Services Provided by General Hospitals (1980)

Child and Adolescent Services in General Hospitals (1982)

Child and Youth Long-Term Services (1985)

Chronic-Pain Programs (1990)

Computed Tomography (1986)

Day Surgery Unit (1982)

Dental Care Unit in Hospitals (1979, under revision)

Diabetes Services (1989)

Diagnostic Imaging Services and Systems: An Overview (1986)

Diagnostic Ultrasound Facilities in Hospitals (1985)

Emergency Services in Hospitals (1989)

End-Stage Renal Disease Program (1986)

Geriatric Services in Acute-Care Hospitals A: Geriatric Assessment and Treatment Units B: Geriatric Day Hospitals (1990)

Health Care Related to Abuse, Assault, Neglect and Family Violence (1990)

Hospital Day Medicine (1984)

Intensive Care Services (1986)

Magnetic Resonance Imaging (1986)
Nuclear Medicine in Hospitals (1985)
Organ and Tissue Donation Services in Hospitals (1986)
Palliative Care Services (1989)
Patient Hostel Unit (1978)
Perinatal Intensive Care Units in a Perinatal Care Network (1986)
Pre-Hospital Emergency Services (1985)
Pulmonary Function Laboratories (1982)
Rehabilitation Medicine Program (1986)
Respiratory Therapy Service (1987)
Services to Elderly Residents with Mental Health Problems in Long-Term Care Facilities (1990)
Reuse of Disposables: An Information Report (1985)
Spinal Cord Injury Program (1986)
Stroke Program (1986)
Vital Organ Transplant Centres (1987)